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## ORIGINAL ARTICLES

### ANNUAL ADDRESS.

DELIVERED BEFORE THE  
RHODE ISLAND MEDICAL SOCIETY

June 7, 1923

BY FRANK E. PECKHAM, M.D.

President of the Rhode Island Medical Society

Medicine is a profession of service.

This service is one, the chief aim of which is or should be to help the people in every medical way. If money is the physician's chief goal, his career is a failure and his real service ceases.

There are a number of vital points where the profession contacts with the people, which are neglected. The methods by which the public may be served and the advance in the ability to serve, should be better known. There should be developed some way, some method of advertising if you please, whereby the "wares" the profession as a whole has to offer could be "put across." Some individuals among the various "cults" and some "cults" as a body indulge in direct and extravagant advertising. In the medical profession it ought to be honest but in some way educational. The people and even doctors themselves are anxious to be relieved of their ills and are not fussy how it is done, but they want it really done.

There is a feeling of antagonism in the profession against the various "cults." This antagonistic feeling is so strong in some quarters that vision is obscured as to the real facts. As stated above, the people and doctors themselves will go wherever they can get help. If a doctor or a layman consults and submits to the treatment of the so-called regular profession and fail to get help, they then are in a position to try anything. In consequence, some doctors and a great many people have a try at some of the various "cults" and strange as it may sound to some, they get what they are looking for in a number of instances.

Another phase of the problem I do not think is appreciated. That is, patients are actually being referred to these "cults" by medical men of good standing in the various cities of the country and

even by members of this society. On the other hand some patients are being referred by these "cults" to the regular profession. That is happening to me and I do not doubt that other members of this society are having the same experience. This means that there is a leveling influence already under way and if allowed to continue will seek the lower educational level. The feeling seems to exist that the profession is "entitled" to patronage simply BECAUSE they are medical men. If one stops to consider the question from the point of view of service to humanity, no man or set of men is "entitled" to anything. Patronage must first be earned by the character and quality of service. The public always have gone and always will go where they at least think they can get relieved of their ills. If failure results in one place they will try another.

In order to eliminate some of the unqualified men, every one agrees that there should be compulsory educational requirements. This would be helpful for the future and it is also to be hoped that the members of the regular profession will brush up on a few things that are not as yet taught in the medical schools. This would slowly check the actual referring of patients away from the profession so that in time it might cease entirely. With this double sided education all men would be more nearly on common ground and the "people" would more nearly get the service they are looking for. In the meantime there are those in the community who are practicing illegally. Anything which is illegal should be automatically taken care of in the Attorney General's office. This should be done without any effort on the part of the profession.

All health problems should be the affair of the "people." Such problems should be removed as completely as possible from partisan politics and with all cards face up on the table these questions could be settled in a much more satisfactory way than is being done at present. Governor Smith of New York State issued an invitation asking college professors, state officials, health board officers, rural practitioners, and prominent city physicians to meet with him and discuss the pressing health problems of the hour. He selected four important

issues for discussion. Governor Smith did this entirely on his own initiative. Here in Rhode Island any Governor would be interested if the subject was properly presented. After this a representative body of men and women could be gotten together for action. Such a body should also include representatives from the legal profession in addition to those selected by Governor Smith. By such means public opinion could be moulded and a much better chance would then exist to straighten out many disagreeable conditions at present existing. If this is not done by the profession and that comparatively soon, it ultimately will be done by the non-medical community, and trained medical men will have only a small influence.

A vast deal of new knowledge has come to us from the laboratories in the past few years. This has come in so rapidly that it has not yet been completely assimilated. In this phase of medical education and practice, the public is not getting satisfaction out of it. In fact a great deal of dissatisfaction is openly expressed. If the profession is to continue to prosper it must practice medicine in such a way as to benefit the people to the utmost. Laboratory knowledge is essential but it is necessary to have something besides. A man who knows how to make all the tests imaginable is not going to do very much for his patient unless he takes into account the human being back of it all, and deals with that phase of the subject. This important question was recently under discussion by the Council on Medical Education of the American Medical Association. I have talked with several men connected with some of our largest and oldest medical schools about this matter. They all admit that the conditions of medical education are not what they ought to be. The different departments and laboratories teach their specialties as if theirs was the whole subject of medicine. This in a way is proper but all of these different departments should be brought into harmony at the bedside of the patient and made to assume their proper relationship, which is one entirely secondary to the clinical picture. Or, as an editorial writer has expressed it, "The curriculum must be revised so that general medicine shall become the *'piece de resistance'* of the entire medical curriculum."

A prominent practitioner in a large metropolitan center being obliged to give up practice because of

some trouble unknown to him decided that the "Group System" was the proper thing. He went to a prominent medical school where the complete staff could have a chance at him. At the end of two weeks he had a number of typewritten pages which set forth the various findings. The doctor then exclaimed, "Well, this is all very well, but what can you do for me?" The answer was, "Oh, go South." Completely disgusted, he returned home a sadder and wiser man and under the care of an excellent and experienced practitioner made a complete recovery. He is now back at hard work and in excellent physical condition. It must be the experience of many men who know results of laboratory tests and special findings, but who are not so closely connected as to have their vision obscured, that patients are at times told there is nothing the matter with them, when in reality with their own visualization keen and clear, the diagnosis is very evident.

This leads to the conclusion that out of all these methods the general practitioner must emerge stronger and better equipped than ever. He must be a man with knowledge of all of the laboratory tests but probably unable to make many of them because he will be too busy with patients. He will be able to make a first class all around physical examination and know instantly from experience just what laboratory and special tests to call for. He will not make the diagnosis from these tests however, but will use them to check up his hard headed experience and judgment. In this way the general practitioner must again come into his own and really control the situation.

However the group method is doomed to failure in the majority of cases. If four or five men, each a strong man in his particular line, meet together, no one of them is going to yield to the others. One will not admit a given sign or symptom unless he can get it himself and not being skilled in that line, he doesn't get it and refuses to believe it. If, on the other hand a group is dominated by one strong personality who takes the group findings and then with his own clinical ability and judgment makes the diagnosis and institutes the treatment the result will be much better. Many groups have been formed for commercial reasons. It goes without saying that this is entirely wrong and deserves failure. Out of forty-eight groups investigated forty-three were failures. There are fun-



damental reasons why group systems do not give the people what they want. For example a surgical group will do surgery in cases which can perfectly well be cured without operation. A physician visiting such a group had witnessed just such an uncalled for operation. When it was all over he asked the operator if he had ever treated such cases by other methods. His answer was, "This is a surgical hospital."

Another phase of modern medicine is that of specialties. There is a tendency for young men to become carried away by some specialty either during their medical school days or in their hospital services. These young men are beginning their careers as specialists. Their only ground-work is the one obtained in a hospital and for private practice this does not seem to be sufficient. They are lacking in the broad foundation which can only come from a general practice and that contact with the human being back of it all. This subject is also being discussed along constructive lines and doubtless steps will be taken attempting its correction.

The profession since time began has not been inclined to co-operate. Each man has gone along his own way letting the other fellow do the same. The hospitals have never been really used as they could so well be, for the mutual benefit of the staff as well as for the advantage of humanity. Every man goes in and does his own work and gets out again. The staff meetings as just now conducted have to do with what is dead and gone. Cases and groups of cases should be carefully studied by the staff. Methods of treatment on the living cases could thus be made of the utmost value. This co-operation was made use of during the war and in the latter part of the war a position of "liaison" officer was created to assist in getting the different departments together. This co-operation in hospital services would be educational to the men so that they would "get together" a little better in actual practice. This getting together would also do away with at least some of the jealousy which seems to exist among medical men. Apparently it is difficult for human nature to see any good whatever in a competitor. It is on account of this that a code of ethics became necessary. The best ethic to make use of is the "golden rule" but the golden rule has been described as one for the "other fellow" to follow.

Feeling that I am too matter of fact to deal with this subject successfully I am going to quote a very short article on ethics clipped from the publication *Life* and signed J. K. M. The title is "In Front of the Manufacturers' Club."

"Ethics are rules adopted by men to protect themselves from each other. They do not. In modern life their chief feature is their elasticity. Any A No. 1 ethic can be stretched from Nome to Cape Horn, linear measure, and still spring back to a smugness that will not even wrinkle a frock coat.

"Every time he faces some doubtful deal that promises a good profit, the man who owns a well-trained set of ethics asks himself, Is this ethical, or is it not?

"If the answer is 'Yes' he goes ahead and takes the profit.

"If the answer is 'No' he goes ahead and takes the profit.

"If the answer is 'Most emphatically not,' he decides that he has been working too hard and needs a vacation.

"And, oh, yes, he goes ahead and takes the profit.

"At best an ethic is a spineless creature. It is the sort of animal that slinks into a corner and cringes while the boss reads the report of the State Factory Inspector.

"In fact, it holds the long-distance cringing record of the universe. It can go into a cringe on the morning of any given day and sustain that posture until its owner has made a suitable contribution to the party's campaign fund. Then it comes out, smiling Uriah-like and dressed in indecent black, to attend the annual convention of the Manufacturers Who Wouldn't Think of Such a Thing.

"Still, ethics are not generally despised. Everyone likes to have one or two about the office. They are so obliging, you know; so obliging that they can make a pretzel look like the shortest distance between two points in their efforts to twist themselves to meet a not-so-particular situation.

"Ethics are like calories, vitamins, complexes and other modern discoveries. They are all right if you do not take them too seriously.

"If a particularly pernicious ethic interferes with business, you know how much an ethic will bring at a receiver's sale."—(J. K. M.)

Certainly J. K. M. has lived and has been "up against ethics."

This society as a body should be intensely interested in any number of public questions which directly concern themselves equally with the people. In Rhode Island I am told there is a large number of tubercular cattle. Most of the milk sold has to be Pasteurized to prevent the spread of tuberculosis. If more cows could be obtained free from tuberculosis this would not be so necessary. We hear a lot about how much better babies are carried through the first year of life by modern methods of treating milk mixtures, but somehow no mention is ever made of the fact that these babies have so little resistance on account of these same modern methods that the most of them die in the next few years. One-half million children under 10 years of age die every year in these United States.

This subject should be taken up in a much broader and more fundamental way than at present is being done.

There is just now considerable activity towards arousing the public to the importance of health examinations. Any state society, this state society, could inaugurate such a movement and the people would respond if they could get what they were looking for. The object of such examinations would be quite naturally the prevention of disease by discovering the earliest signs of faulty function of any of the organs. To begin with, it is the consensus of opinion that there are very few physicians trained or competent to make such examinations. These examinations would have to do largely with people who are well or at least who do not realize that there is anything particular the matter. The trained physician today is trained to recognize and treat pathological conditions. For this new work he must be trained to recognize the faulty physiological conditions which precede pathology. He must become more familiar with very early signs of disease (or pathology). He must be very much better trained to give advice regarding methods of living, eating, dressing, sleeping, exercising, etc., as well as hygienic conditions and the environments of individual patients. The American Medical Association is already interested in this matter. The state society could by means of an ACTIVE committee stimulate the interest not only of the medical profession but by ethical methods, the general public. When the public really appreciates that something is for their benefit, they

will respond and their interest will increase as time and results demonstrate the advantages.

Insurance in Rhode Island is not what it ought to be. The compensation act is better than it used to be but not satisfactory. There was a hearing at the State House a few years ago at which it was brought out that the premiums collected amounted to a very large per cent on the capital invested in this state. Does this indicate that either the premiums are too large or the amount disbursed to employes and doctors is too small or possibly both? These figures are obtainable as I understand it, and if made public in the proper place would be helpful in correcting such a condition.

There are several other vitally important questions which could be well taken up by this society as a whole, and by publicity methods which could be perfectly ethical, almost anything which was for the benefit of the people as a body politic could be obtained. The profession has never gone into such things except in a mild way. It should act in a constructive way and with such enthusiasm that failure would be an impossibility. Such things can only be accomplished, however, by a better co-operation and friendship among the members of the medical profession.

I firmly believe there is no class of men who give more of themselves for humanity's sake. Also, I believe that when a medical man gives of his skill and ability just to be helpful to some suffering human, especially when there is no possible material reward, he comes near to following in the footsteps of the humble Nazarene, who simply went about doing good. If this is so for the individual, how much more good could be done if medical problems directly affecting the public could be taken up in a large and in a public way, by such a body of men as is represented by the Rhode Island Medical Society.

In closing I want to say that I have enjoyed being your presiding officer for the year that has passed. Every man whom I have asked to read a paper before you has promptly and without hesitancy said "Yes." One reader asked for the privilege. This shows a spirit that the society may well be proud of. You have a wonderful secretary. He knows all the ins and outs and in a very quiet manner makes the way of the president one of ease.

I wish to thank you for your kind attention.

## DIATHERMY IN PNEUMONIA.\*

HARRY EATON STEWART, M. D.

NEW HAVEN, CONN.

Modern Physiotherapy had its inception in the Medical Corps of the army. There for the first time all of the physical means of treatment were grouped together under the control of regularly trained medical men who specialized in physical therapeutics. More than a quarter of a million treatments per month are still being given by the Government Medical Agencies. The results have been on the whole very gratifying, and they indispensible for post-war government work. *Pneumonia* is one of these conditions.

Electricity was very widely used in the Service work, and diathermy proved to be perhaps the most valuable modality. The heat produced by this current develops deeply within the tissues, differing sharply therefore from other methods, the aim of which is to drive heat into the body from without.

American physicians, among them Byron Sprague Price and Frederick DeKraft of New York, were the first to suggest or to employ diathermy in pneumonia. There were, however, no detailed case reports nor any information which would throw light on the value of diathermy in pneumonia as far as the writer is aware, until his publication of the first ten cases treated under his direction at the U. S. Marine Hospital No. 21, New York City, in 1922. As far as is known there is no mention of this subject in foreign medical literature. For some time it was thought that diathermy would help in the treatment of lobar pneumonia. From every point of view it seemed reasonable to suppose that a centrally located heat of from 110° to 120° F. developed in the affected lung without any cost to the body in instituting this rise in temperature should have a favorable effect upon the pneumonic process. It was believed that this heat would dilate the pulmonary capillaries and lymphatics, promoting a more active circulation. Perhaps to some extent it might also "melt down" the exudate, thereby increasing the amount of pulmonic ventilation. Also it was thought possible that it might inhibit and to some extent destroy the organisms and reduce, through its

known analgesic effect, any associated pleuritic pain.

Dr. Young, Medical Officer in charge of the Hospital, and Dr. Bryan, his Chief of Medical Service, agreed with me that we would use it on the first case which seemed beyond medical help. The first such case occurred in January, 1922. The results we obtained were startlingly favorable, the temperature dropped by lysis, each treatment gave marked symptomatic relief, and the man made an uninterrupted recovery. We realized that this result might be merely accidental, that such things occur particularly often in this disease, and yet we were sufficiently encouraged to continue with this form of treatment.

The first series of ten cases were reported to the American Electrotherapeutic Association last September and printed in the October number of the Society's Journal.

In the fairly large group treated since, the following routine has been carried out:

The daily physical findings were made in each case by the ward surgeon, Dr. William T. Boland, and the present medical chief, Dr. John Ridlon. The charts kept by the nurses were carefully checked up. The laboratory work was done by Dr. Taylor, Chief of that Service, and the department of physiotherapy was concerned simply with the actual administration of the treatments.

The work done during this last winter, fall and spring is reported by the permission of Dr. C. H. Lavinder, present Medical Officer in Charge. The writer is especially indebted to Dr. Boland for gathering together and analyzing data, including blood pressures, etc.

These hospital cases together with several groups from private practice of myself and colleagues give us about seventy cases to date in which diathermy has been used in lobar pneumonia.

We have had all types of the disease checked up carefully with complete clinical records and a fairly large group of controls in the hospital. It is realized that this is not a sufficient number of cases in which to reach definite conclusions, but they certainly justify further use of this form of treatment.

The writer has been encouraged to continue this work by the fact that every aide, nurse and physician who has actually seen the treatment properly given has expressed their faith in it. Further

\*Read before the Annual Meeting of the Rhode Island Medical Society, June 7, 1923.

study may demonstrate that diathermy is not equally efficient in all phases of the disease, perhaps even contraindicated in some.

To treat cases by diathermy the physician must have an efficient piece of apparatus delivering a good D'Arsonval current and supplied with a meter. He must understand the physics and physiological effects of the current and know his technique. While diathermy technique is not very complicated, it is rather exact. As in other types of treatment the earliest possible administration of diathermy is desired once a diagnosis is made. As far as the writer is aware, no case has yet been lost in which diathermy was used before the third day. This does not mean that cases treated early will not be lost in the future, but it at least emphasizes the value of early treatment. We do not have to wait until the sputum has been typed as is the case in using serum in type I. The word "cure" is not used nor meant to be implied in this paper. It is the writer's personal opinion that an adjunct which may be applied to all types of the disease, which will prove at least as effective on the average as serum has proven in type I, has been found.

*The Nature of Diathermy.* Let us consider for a moment a few features relating to diathermy and its effect on living tissue. Diathermy is the application of the bipolar high frequency current of D'Arsonval, discovered by him about 1890, and first used in this country in 1906. Its use in hospital practice by means of modern apparatus dates back to only 1910. Our experience with this modality in the government work must have exceeded a million treatments in 1919, and is still not far from that figure annually. New indications for its use in certain pathological conditions of lung, heart, kidney and brain are rapidly being worked out. Pneumonia and empyema are two of these conditions.

The D'Arsonval current is one of high voltage and relatively high amperage which oscillates with extreme rapidity. The apparatus should by preference be supplied with a 110 volt, 60 cycle alternating current. This current it "steps up" in voltage to many thousand, cutting down the amperage in direct proportion and increasing the alternations to a million or more per second. The current thus produced has been compared to water power, particularly to a stream coming from a fire hose

through a spray nozzle, harmless, yet with great power behind it.

The *spark gap* requires constant care in order that the current may be smooth in quality, free from faradic effect and of sufficient volume due to proper charging of the condensers. The *milliamperemeter* consists of a wire in the circuit which expands by the heat produced, moving the needle on the scale. It indicates the total amount of current the patient is receiving, but does not indicate with any exactness the amount of heat actually being generated in the tissues. This depends upon the current density, that is, the number of milliamperes per square inch of electrode, and the density of the tissues through which the current passes. For instance with 2,000 milliamperes of current and 5 x 4-inch plates we have a current density of 100 per square inch of electrode. This meter reading and these plates would develop far greater heat applied to the knee joint than to the abdomen or chest.

If the plates were larger less heat would be developed in either locality. In the consolidated lung we have an intermediate condition of soft tissue density and use from 1,000 to 2,000 milliamperes of current by means of about 5 x 7-inch electrodes. It must be remembered that the heat produced varies as the square of the current strength, therefore, slightly increased meter reading may mean considerably greater heat production.

The *physiological effects* of diathermy on living tissue naturally differ greatly from those of any form of external heat. We obtain locally very little effect upon the skin with the use of the proper technique. In the deeper part of the pathway of the current we have the main effect, which is an acute temporary dilatation of the capillaries. This causes both a thinning of the capillary wall, and widening in the intercellular spaces, resulting in an augmented outpouring of blood serum rich in repair material. It means also that in a given tissue area there occurs a vast increase in all of the blood elements, the erythrocytes with their contained oxygen and of phagocytes which enhance the local resistance to bacterial invasion. The net result is to double or triple the local repair material and protective forces and to promote those cellular interchanges of gases and fluids upon which metabolism depends. Thus a temporary active and not a passive congestion is brought about. The resis-



rance to the circulation which takes place in the finer capillaries is lessened by their dilatation. Hence the speed as well as the volume of the local circulation is increased. The lymphatic drainage is also augmented. The oscillations of this current are so rapid that no ionic movement and no muscular contraction is induced. Pain is relieved by the effect of the current on sensory nerve endings within its pathway. Within a very short time after the cessation of the current the capillary dilatation disappears. Systematically there is a slight rise of body temperature due to the circulation of the heated body fluids, the same factor which prevents local external heat from having any degree of penetration.

In febrile conditions such as pneumonia little further increase in temperature is found during the treatment. As a rule both systolic and diastolic blood pressure is reduced slightly. In pneumonia the reduction is often quite marked and was for a time considered a contraindication to its use in patients with hypotension.

A number of experiments are given in the literature which illustrates the effect of diathermy, showing an increase of body temperature, which may reach as high as 20° F. on the skin between too closely placed electrodes from the so-called edge effect developed between them. It is very easy to cook meat, potatoes or egg albumen between the electrodes with this current. Here we have no fluid diffusion to prevent excessive heat accumulation. In various experiments upon living animals the temperature has been raised from three to twenty degrees. We may be absolutely certain, however, that no destructive effect is obtained where the proper technique is employed.

*Apparatus.* Practically all of our work was done with small compact portable apparatus supplied with a meter. It is necessary to use one which will deliver a D'Arsonval current of good quality and up to 2,000 milliamperes. A machine which will show a high meter reading with a comparatively low spark gap is to be preferred.

*Electrodes.* In all of our pneumonia work we have used composition 22 gauge flexible metal electrodes. This material comes in sheets at moderate cost and can be cut into convenient sizes and shapes. The edges should be sharply turned back

and rolled flat with a slightly longer flap on one end for the attachment of the cord clip. Some prefer the thinner metal which may be doubled and still remain very flexible.

*Technique.* With a pair of plates suitable in size to the involved area of the lung and the machine set up, we are ready for the treatment. The electrodes are covered with heavy warm shaving soap lather. The posterior one clipped to the cord and turned lather side up on a heavy folded bath towel. By depressing the mattress this electrode may be gently moved under the patient to the desired location without disturbing him in the least. The anterior plate is then clipped on and placed on the chest wall so as to include the affected lobe or lobes directly between the two plates. They should not approach each other on the lateral wall of the chest, otherwise an undue amount of current will pass between these near edges rather than through the affected lung. The posterior plate is secured by the patient's weight. The anterior one may be gently held on the chest or secured by adhesive plaster. Cords and clips should be covered so that they will not be torn loose by a restless or irrational patient. With everything in readiness the rheostat and spark gap are slowly advanced until the desired amount of current, usually between 1,000 and 2,000 milliamperes is reached after about five minutes. This is maintained from fifteen minutes to an hour, usually twenty to thirty minutes, after which it is slowly reduced during a further period of two or three minutes to zero. If it is desired to localize the heat more sharply this may be done by using a slightly smaller electrode nearer the point it is desired to reach. If any points of burning or tingling are complained of, turn the current slowly off, reinsert more soap lather with finger or brush, press the electrode gently in place and again turn on the current slowly. As a rule the treatments are given twice a day, but there is no reason why in the critical stage of the disease more frequent applications should not be made. One treatment a day is probably sufficient during the period of resolution.

*Results.* I do not need to remind the members of this society as to the caution which should be exercised in accepting any new treatment as of value in a disease which varies so greatly both in type and seasonal epidemics as does pneumonia. In estimating the value of diathermy in this dis-

ease many factors must be reckoned with. Among these are the patient's age, previous indulgence in alcohol, the day of the disease in which the treatment is first instituted, his care up to that time, and the concurrent nursing and medicinal treatment he received. Furthermore the effect of the treatment on the mortality rate, temperature, pulse, respiration, additional lobar involvement, rate of resolution and complications should all be made clear.

Our cases were all adults, nearly all of them merchant seamen, averaging about thirty-five years of age, and many of them were moderate users of alcohol. Most of them were taken ill on ship board with little skilled care until they arrived in the hospital. Judging from the mortality figures obtainable, the rate in such a group should be about 40%. We had a group of twenty-one control cases whose treatment and care was similar except that they did not receive diathermy. In the group treated by diathermy the mortality was less than 20%, in the control group it was 42.9%. A number of other cases treated by diathermy outside of the hospital added to those so treated in the hospital, gives an average mortality of less than 12% so far. Among the deaths in the cases treated by diathermy were two in which five lobes were involved, two others in which four were involved, and none of them received diathermy before the third day. Temperature, pulse, respiration and rate of resolution all seemed to be favorably effected by the treatment. Extension of the disease, however, to other lobes was not prevented. The temporary symptomatic results were quite marked in nearly every case treated.

This period of lessened pain and dyspnoea lasted in most cases several hours and was in itself enough to justify the use of diathermy in these cases.

In concluding, I wish to emphasize the absolute harmlessness of diathermy in these cases when properly employed. No definite contraindications for its use have yet appeared, but as before stated a larger group of case reports may reveal such contraindications. In view of the fact that symptomatic relief is almost certain, that the treatment is without danger, and that the figures so far show a marker reduction in mortality, which we have every reason to believe will be confirmed when

more cases are available for study, I feel that the further employment of diathermy in pneumonia is absolutely justified.

#### A CORRECTION.

In the discussion of Dr. Miller's article on "Obstetric Shock," which appeared in the September issue of the JOURNAL, that of Dr. C. H. Leonard should read as follows:

"It seems to me that in this very interesting paper Dr. Miller has emphasized his part of the work and has attended to that thoroughly. He omitted, however, to emphasize the physician's duty of following up the delivery, and of seeing that the uterus remains *contracted*. He has not gone into our part of the business. That, I feel, is one of the most important things. I have seen the nearest cases to shock *due to the attendant's not following up the contraction of the uterus* (e. g., by holding his hand over the fundus).

"About the only anaesthetic I remember that the late Dr. Chas. Wiggin used was chloroform. He would put a teaspoonful or more before the patient and go ahead with the forceps. I have not followed that, but have followed the plan of Professor Fordyce Barker, of New York, who advises us to put a few drops on a little handkerchief in the bottom of a light tumbler and have the patient hold it before her face as a pain comes on, and before she would greatly come under the influence of it she would drop it, and the worst of the pain would be over. I may note that on one occasion *the late Dr. George W. Stanley, of Slatersville, a Fellow of the State Society*, was called out quite a distance from his home to attend a woman in confinement. They had no trained nurse and no one in attendance only those in the family, or perhaps a neighbor, and he had to attend the patient *without professional assistance though he had to deliver her by craniotomy*. And she got well."

Very truly yours

CHARLES H. LEONARD

# THE RHODE ISLAND MEDICAL JOURNAL

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**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. James B. Littlefield, Esq., President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### ENLIGHTENING THE PUBLIC.

Several months ago, in these columns, it was suggested that the profession take steps to enlighten the general public on matters medical, to give them a fair idea of the enormous amount of time, thought and sacrifice given by the physicians of the world, to explain how much has been accomplished in some fields and what difficulties have been met in others, to state simply certain theories which we hold and to repudiate theories and state-

ments made by half-baked exponents of the healing cults.

It is gratifying to learn that in at least two states, this idea has been developed to the point of actually beginning a campaign to educate the public as to matters pertaining to health. Another state is preparing to carry on an educational campaign through the newspapers. This work is being done under the auspices of the State Society.

"Hygeia" is also justifying its existence by explaining in clear, easily understood phrases certain problems and subjects which the laity are anxious to learn about.

We would again recommend for the consideration of the Rhode Island Medical Society, the advisability of instituting free public lectures as a means of enlightening the masses and of shaping public opinion.

#### VALUE OF CLINIC WORK TO THE PHYSICIAN.

Outside of cities which are medical teaching centres, hospitals have difficulty in obtaining the services of physicians to treat patients in the out-patient department. Certainly it is hard to find the right kind of men. In the first place the hospitals prefer to have on its staff men who have graduated from the best schools and served in the best hospitals. In the case of specialists they should have had a real training in their line of work and not simply taken a so-called course in some American or foreign medical centre. At any rate, every physician who is selected for any hospital staff should be well qualified.

There is one characteristic which sometimes overbalances excellence in training so far as usefulness is concerned and that is the faithfulness with which the hospital work is performed. Too many men do not take the responsibility of their positions at all seriously and perform their duties superficially, well enough to keep them on the staff and allow them the privilege of treating private patients. They are late for clinics or ward visits or do not show up at all and patients are "run through" as rapidly as possible.

Instead of appreciating the honor of being associated on a staff made up of the best talent in the community, and of the wonderful opportunity for studying disease in a hospital, provided with all modern appliances, too many young men consider that it is the hospital who is fortunate in having them on its staff. Work in the out-patient department is looked upon with small favor and is usually done with the hope of a "house" service. As a matter of fact, service in an out-patient clinic can be made to be more useful to the physician himself than a house service. In the medical centres of this country and Europe, many authors of textbooks and noted in various lines of work have done their work entirely in an out-patient service, never having had a ward service.

There may have been some discouragement to out-patient physicians in the past because of the lack of equipment and assistance. But that is not true today. Better quarters, abundance of equipment and social service make the duties of the out-patient physician much easier, giving him more time to concentrate upon individual patients.

Every young man should seek work in one or more out-patient departments, seek to learn all he can by doing progressive and faithful work. His clinic will grow as surely as any business grows when a live man is behind it, and when the time comes he will be ready and will be rewarded by the hospital authorities by being called to fill vacancies in the house. His good work in the out-patient department also makes his job in the house much smoother. When he asks for apparatus and assistance for his work, the hospital authorities will gladly grant it when it might be refused to another who shows little interest in his duties.

#### OUR MEDICAL LIBRARY.

That our Library, admirably situated as it is, should be so little used by our Fellows or by allied organizations has long been a matter of common debate. Certain conditions, however, have no doubt contributed to this undesirable state of affairs. Primarily, we are so situated that the sound-waves from both the trolley and the steam roads seem to find a peculiar affinity in our auditorium and council chamber; in addition, we might say that the acoustics, especially of the auditorium, do not greet our expectations happily. If we might suggest to our trustees, without offense, the advisability of correcting as far as may be this fault, it would be appreciated by everyone that has occasion to be of the audience.

A correspondent writes: "Something surely must be done to remedy the unfortunate acoustic properties of the hall in which the Association and the State Medical Society hold their meetings!"

"The voice of a speaker, even one standing on the platform, will fail to reach more than half the hearers (so called) unless it is unusually clear and distinct and of just the right pitch. On the other hand, the sound of whispering or talk in an undertone at the rear of the room is conveyed in a confusing way to the very front of the hall."

Another regrettable factor appears in proclivity



of many of our speakers, in seemingly failing to realize that they are conducting something of an inaudible monologue—we might say in passing, however, that this propensity is not confined to the medical profession.

We have many men in our societies so splendidly equipped mentally, that listening to whom in ordinary conversation is an intellectual pleasure; that so little significance should be attached to clear enunciation and fullness of voice with these who by study and experience could tell us much, is as remarkable as it is disappointing.

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ADDRESS BY DR. CHARLES CARROLL  
BEFORE THE RHODE ISLAND  
MEDICO-LEGAL ASSOCIATION,  
APRIL 26, 1923.

*Mr. President and Members of the Association:*

The subject this evening is in a general way to outline the purpose of and take up particularly the joint public interests of doctors and lawyers in rehabilitation; lawyers handling compensation cases for corporations and for clients who may be injured, and doctors who in the first instance have rendered first care.

In the first place, what is rehabilitation? It may be defined as the re-education of the person who by reason of injury or disease has become unfitted to pursue his regular occupation. Many a person unless helped by the training for a new job would become a private or public charge.

The interest in rehabilitation in the United States, as far as the Federal Government is concerned, is one of the by-products of the war. The Federal Government early realized that one of the first things that would happen would be the return of some of the boys from war by reason of wounds and disease, deluging our industries by a large group of people who had become unfit to carry on. In consequence our Federal Government passed the Rehabilitation Law, and these men were turned over to the Federal Board for Vocational Education. A plan for rehabilitation was laid out covering a period of five years, based on an average number of cripples because of wounds or because of sickness, providing care and re-education for that average number over the period of five years. Just as the war was going splendidly the armistice came, and consequently, instead of getting subjects

for rehabilitation on the average plan, they came to the Federal Board of Vocational Education in a lump. The consequence was that the Board found itself without means for handling them, as its plans were not based on the expectation of handling the entire product at once. The plans the Board had made for training soldiers were useless. The Board found itself without teachers, found itself without schools, without the plants in which to conduct training. The consequence was that the work of the Board came into great disfavor. It found itself with a job on its hands which was too big.

The possibilities of rehabilitation among soldiers are the same among citizens. There are a great number of industrial accidents each year. A large number of persons are so injured as to make the proposition an imposing one for states or cities. A large contingent of citizens is rendered unfit to follow regular occupations on account of disease. Another large contingent is removed from plants or factories by industrial accident. Some victims we see begging, some subjects of charity; all drifting along living unsatisfactory lives.

Rehabilitation from a citizen's point of view aims to take any person who has become unfit, give him sound training and place him on a job. The Federal Government made an appropriation a few years ago to cover three years of service, which expires in 1924, and which will not be renewed unless Federal rehabilitation for citizens is satisfactory. It provides for co-operation between the Federal Government and the States. The States, through State Boards of Vocational Education, set up an organization and undertake to provide education and to meet half the expense thereof, and funds appropriated by the Federal Board make up the other half. This is the same plan that Congress has followed in other lines recently.

In Rhode Island we are ahead of the Federal Government. Rhode Island passed the Rehabilitation act in 1919. When the Federal Law came into effect, the General Assembly accepted the benefits of Federal funds and rewrote the State act making general provisions in the form of the Federal act, and providing for the handling of all cases requiring rehabilitation on account of disease. In Pennsylvania a very elaborate system has been set up. Instead of being in charge of educators, it is linked up with the Compensation Board. In Mis-

issippi and Minnesota rehabilitation has been provided for in a general way. In fact, twenty-three of the forty-eight states have accepted Federal money and are doing something along the lines of rehabilitation.

In Rhode Island we have had a number of cases commensurate with the total population of the state. We are 26th in population. We have not had a large number of cases, and what we have had show great possibilities. We had the case of a man who lost the hearing in one ear in his youth, and by reason of an industrial accident finally lost the hearing in the other ear. He was employed in a manufactory. Unless something were done it was probable that the man ran the risk of not only losing his hearing but his speech as well. Loss of hearing is usually accompanied by loss of speech, either total or partial. It was decided by the Board that the best thing to be done was to provide instruction in lip reading, the same type of instruction as given in the Rhode Island Institute for the Deaf. Instead of sending him to the Institute, one of the teachers of that Institute was hired to visit the man's home and instruct him in lip reading. He is now back on the job, having learned in six weeks. The use of State money can furnish intensive results beyond his means. He was placed back on his old job. After the man is back, it is most desirable to train him there.

There were two cases of girls with infantile paralysis; one seventeen and one nineteen. The problem was to find an occupation for girls which could be carried on at home, providing reasonable returns and enough to assure self-support, and to do it without taking the girls from home. After the cases had been studied it was found that both girls had had some training; one had a decided leaning towards art, the other had not so decided a tendency that way, although she had some notion of beauty. They were given personal instruction in millinery. We set up a millinery class in the girl's home for six hours a day and furnished materials to the girls to make hats. Now they carry on a good neighborhood trade, realizing satisfactory returns.

We have a large number of cases of men with a limb or part of a limb gone from machine shop accidents, or the accident results in the loss of fingers or part of hand or foot, and when they consider that the hand is one of the most important mem-

bers used in their occupation they find themselves no longer able to carry on. They need instruction to enable them to carry on another occupation and become satisfactory wage earners. We found the resources of the Rhode Island School of Design a fine thing for Rhode Island. Most of us do not appreciate it. In the first place it has a method of teaching great varieties of occupations, and we found that there at the School of Design there were teachers to teach, and machines and materials to work with in teaching. We found the school willing to respond, willing to match its services against everything. In spite of the fact that our rehabilitation students involve the giving of more time than customary, and special work, the School of Design accepts our students at regular rates. We suggested that they are entitled to more money, but they refused to accept it.

One thing that has come out rather interestingly is the part that early education and training has in the possibilities of rehabilitation. We had one man who had lost one leg completely and part of the other leg, and with a paralyzed left hand, but he had a good right hand. This man came from Europe. He did not have a school education, and no education in America. He had been doing laborer's work. There was nothing constructive we could do with that man. Where there has been no preliminary education, sometimes nothing can be done.

When anyone with an injured hand or leg chooses to pick out any ordinary type of education, we do what we can to transfer them there. Commercial practices are sometimes more valuable. One who has lost a hand or leg sometimes has the ambition to go to commercial school to learn stenography, typewriting or accountancy, seeking to enter offices. The question which we have to settle is whether or not their preliminary education is sufficient to warrant sending them to commercial school—whether the person will be worth while.

We have separated our work for the blind from rehabilitation. The work for the blind is still carried out by the Institute for the Blind. We have not had rehabilitation cases which could be handled otherwise.

Prosthesis is the furnishing of artificial limbs or appliances. The old type of prosthesis is the furnishing of something ornamental. The first

case we had was that of a boy from Newport, whose hand had been caught in the gears of a chewing gum machine and taken off. Somebody in Newport told him of our work. He came to Providence and we undertook to train him for a job. We told him that we might furnish him with something to replace his lost hand, and showed him a picture of a Dorrance hook. This is an artificial hand with two rings of steel bent together with springs and rubber, and operated for opening and closing by a strap over the shoulder. Once he would get hold of anything it was impossible to take it away until he opened it up. It would be impossible to take a pencil or tool out until he opened it. It was arranged to hold a hammer, or a razor, or the handle of any utensil to feed himself. We offered to buy him a Dorrance arm which he could use every day in his home and in the shop. He said: "I don't want that. If I have a thing like that the public will look at me. Can't you get something that looks like a hand?" One of the things we have to contend with is this. They are not satisfied with a useful artificial limb. They want something to look like a real hand or foot so people will not turn around and look at them. Nobody wants anything which does not look like the real thing. Most of them have no ambition to care for work. Many have compromised by taking the Dorrance hand and also an artificial hand to wear on the street. When he leaves work the artificial hand replaces the Dorrance one. He has every appearance of having had no injury, and looks like a regular fellow which he wants to be.

Prosthesis means more than to restore personal appearance. Some want an appliance which can be used for work. The Dorrance arm is quite satisfactory.

We have a boy in the School of Design at the present time who has a talent for drawing and design, but who has had very little occupational training. He was injured while working on a printing press, but did not know enough about the printing business to be successful if he took up that trade. We advised him not to return to the printing business because he did not know about it. We decided to try him out at the jewelry department at the School of Design. He had rather an unusual injury. The surgeon in handling him cut away part of his hand, the fingers between the little finger and thumb being taken off, leaving him with the thumb and little finger. It was one

of the most difficult prosthesis cases which can be had. It would have been better for the boy if the doctor had cut his whole hand off, because we were faced at the outset in the handling of a difficult case and training the boy to use an artificial appliance. What remained of the hand was more a detriment than a help. We found something to replace the three fingers, but finally decided that he would get much better results with the artificial appliance and working in that way.

Where is the lawyer's interest? Although the Workmen's Compensation Act was drawn for the purpose of taking business away from lawyers, still there is a great deal of compensation business which is handled by lawyers. From unfamiliarity with the Compensation Law many of those who are injured will go to a lawyer to get the best settlement which may be had. In dealing with lawyers of corporations or indemnity companies, they will be at a disadvantage unless they have equally trained men to represent them. There is still a volume of business falling to lawyers. The Compensation Law provides in a definite way for payments covering long periods of time, for periods of time in cases of slight accidents. The tendency is for lawyers who are serving corporations and guaranty companies and who are serving their clients to work for lump sum settlements. No worse thing can happen to a man who by reason of an accident is liable to be a subject for rehabilitation. In order to train such a man he must be under training for a considerable length of time. If he gets a lump sum he will stop and do nothing. He lives on it, and when the money is gone he is reduced to want.

If proper co-operation could be had he would not have a lump sum settlement, and this lack of ready money in a more or less large amount would teach him to consider his needs. The money would be spread out in payments, and the man not having a lump sum in a large sum of money to fritter around would get just enough for the period of training to insure support of himself and family. It is a most difficult situation in rehabilitation. We have plenty of money for instruction, plenty for prosthesis, but no money for support. When the law was passed it was expected that a man would have support, and that the Compensation Act would operate as laid down in the statutes, payments covering long periods of time. On compensation during training lawyers can help us by consider-

ing the primary interest of the man seeking compensation. I do not believe that \$3,000 in a lump payment is worth as much as spread over a long period of training. After compensation is agreed upon of a certain sum, don't let him have it all together. It looks like easy money. Lawyers can help by working against lump sum settlements and calling attention to rehabilitation service, telling their clients what can be done at the expense of the State and Federal Governments. We are going to stay even if the Federal Government goes out after 1924.

Doctors operate with a view toward Compensation laws. Usually surgeons save everything possible. Where three fingers are gone, the surgeon inclines to save as much of the hand, or as much of the finger, as possible. There was the case of a man who fell down stairs, and had an operation to remove part of his foot. Blood poisoning set in, and gangrene. The doctor in the hospital decided to operate. The man was operated on ten times, a small piece of the leg being taken off each time. This doctor was trying to save everything possible, having in mind the Compensation Law. Doctors know as well as lawyers that compensation depends upon the nature of the injury, and that larger compensation is paid for a part of leg than for a part of foot, and that much depends upon the amount taken off. They operate with that view in mind.

There was a case of a boy who had been injured in Pawtucket in a railroad accident. Doctors finished him up by cutting off part of his right foot and part of his left foot. We have been trying to find an artificial appliance for the boy to work with without crutches and cane. A high school boy, leading his class, had an injury to his hand and arm. The doctors operating saved part of the stump of the hand. We tried it out with different companies and experts to get a proper appliance. It would have been better for the first boy to have cut off both feet above the ankle, and for the second boy to have cut off the hand above the wrist. In either case the job of furnishing artificial appliances would be much simpler. We want the doctors to think of prosthesis when giving first aid or making operations; to cut with a view toward prosthesis, not only the possibility of saving everything possible; to consider the future, to cut enough to make a clean job—to make a prosthesis job. We want the doctors to suggest to patients

and companies the possibilities of prosthesis and rehabilitation.

The doctors have a wide field in disease. Persons having congenital diseases, or other disabling diseases, become proper subjects for rehabilitation. In a great many instances they are better taken away from their occupation and trained for something else better suited to their condition. Should tuberculosis be present, they should be taken away from confined employment and be on something else. Sometimes a person has ability, which, if properly trained, would make that person a satisfactory citizen.

I have tried to put up these problems and would be glad to have discussion.

Dr. Carroll was asked if there could not be a second operation performed in some of these cases to make prosthesis more readily handled; to which he replied, "There could be a secondary operation if someone would pay for it. It would involve a great deal of expense for operation, hospital care and period during which the person would be completely out of service. The doctor should have considered possibilities of the future."

DR. BROWN: May I ask how old was the boy who lost the fingers of his hand?

DR. CARROLL: Nineteen years old.

DR. BROWN: There came to my mind the case of a man who had lost three fingers of his hand in a like accident. This accident occurred when the man was in his twenties. He was employed moving ashes out of a cellar, but he could lift more with his little finger than I could lift with my whole hand. In order to test out his strength I found out how much he could lift. I feel that everything possible should be saved. I am reminded of a certain surgeon to whom someone complained that his stumps were irregular. He replied that he was not making stumps to fit artificial limbs, but would require that they make the limbs to fit the stumps. It is not my belief that any surgeon amputates to save a lot, but to make a clean job. A man does not seem to have much concern about anything other than how he is coming out. He is more concerned to get along himself than that the country will prosper.

DR. CARROLL: Most of them have enough foresight to realize the possibilities of rehabilitation. Some do not. If a case can be handled in a definite way, most of them do not care. Handling is



most unsatisfactory. It is most difficult to get them to undergo training.

DR. GOSLINE: The discussion has been so far of accident and disease, and of physical disabilities. It seems to me that there is a training field for mental affairs and mental disease. I would like to ask if any work has been done along these lines—rehabilitation of mental disease.

DR. CARROLL: We have had no cases of mental disease. What cases we have seen are in the Exeter School. Dr. Ladd says nothing can be done with those who are decidedly feeble-minded.

Dr. Carroll was asked, "In the case of a man working for a construction corporation, living in Rhode Island, but going into another State to work, what law applies, the law of Rhode Island or the law of the other state?"

DR. CARROLL: The law of the state in which the accident occurs. Under the Rehabilitation Law, any resident of Rhode Island would come under the law of Rhode Island, and apply for rehabilitation in Rhode Island.

MR. LITTLEFIELD: I would like to ask if you have any agencies for locating cases.

DR. CARROLL: We have nobody traveling looking up cases. People about the State who know about the work send in cases. There are not enough to keep us busy. We can do a lot more work, but we are afraid to advertise too extensively.

We see persons begging on the street. Nobody who is begging has been induced to take rehabilitation. They say they are getting more money than they ever earned before. I have talked with most of the sturdy beggars, and not one would make application.

DR. SKELTON: Of course some of these permanent and total disabilities can be to some extent, in my opinion, avoided. I have perhaps done more compensation and industrial surgery than any other surgeon, with the exception of Dr. Flynn. For several years I have had the oversight of more than twenty-seven hundred men, who keep me busy, and I speak from the viewpoint of a surgeon who has had a considerable amount of experience in industrial surgery. I have one thing in mind—to preserve as much as possible every part of the human anatomy to give man usefulness. I have done the same thing many times. I had fifty-nine finger cases in Warren in one year. Every man had a good result.

The Compensation Act in Rhode Island is the rottenest condition of any state in the Union. We can never tell when some shining light of the bar will slip something over on us at the State House on the Compensation Act. In serious injuries like fracture of the hip or compound fracture of the thigh, very little is done before \$200 is eaten up. Insurance companies have limited the services of a doctor to eight weeks; and his fee to \$200.

DR. KELLEY: The limitation to \$200 is by statute. I am sorry that no medical man has come to court and asked if a man is worthy of his hire. I believe that if a man gives his professional attention to a case, he can recover even if it amounts to more than \$200. I have dealt with quite a number of representatives of insurance companies, and find they are very chary when approached on the \$200 proposition. Men of integrity feel that they are willing to kick over the traces to see if this cannot be brought to an issue. This \$200 limit was something put over on the doctors.

DR. SKELTONS I would like to say that if Dr. Kelley should go before the court with a bill of \$210, the court would decide that he had no honor.

Comment was made that "The question of the amputation of a perfectly good thumb for the sake of making a perfectly good stump would meet with the opposition of the patient, and he would not give his consent. He would not allow anybody to cut off a perfectly good thumb to get a perfectly good result for an artificial hand."

DR. CARROLL: There was recently an interesting exhibition in Cleveland of artificial appliances of every sort. There were men using these appliances, and it was a revelation to see what these men could do. There was an artificial limb salesman, who came into the office a while ago. I found that both his legs had been taken off above the knee, and he was using artificial limbs. He was so good that the company had hired him as a salesman.

MR. MATTESON: From limited experience I find that the pleasure of a client is to try to get a lump sum settlement. Two women, one French, came to me a while ago. The French woman was a weaver in Pontiac, and her left arm was useless. She came from Canada, and was sure she could buy a little shop in her native village where she could be in the center of activities, and insisted upon a lump sum settlement, and all views from

her circle were to that effect. The other was a laundry woman, and she insisted upon getting a lump sum to get an interest in a periodical store in Baltimore. I think the lawyers will back me up in saying that the practice is to make lump sum settlements. These women were thirty-one or thirty-two years old. It is something to think about. Perhaps the next one will be young enough to take advantage of rehabilitation. The tendency has been to get money and get away with it.

JUDGE RUECKERT: In view of the pressure exerted on a lawyer, it is asking a great deal to expect that a lawyer should refuse to listen to the wishes of his clients in a matter of this sort. Some lawyers will do that, some will be influenced by the fact that the client wants a lump sum, and satisfy their clients and keep the business that comes to them for this purpose.

MR. LITTLEFIELD: I have seen a number of cases where small payments coming regularly is the salvation of the family, and my experience is that a lump sum would very soon be gone in some foolish venture. In one case I obtained a settlement for \$3,000 for a little girl's hand, but they were marched to the bank to deposit it in her name so that it could not be touched. Of course we had to give some money to the parents.

## HOSPITALS

### RHODE ISLAND HOSPITAL.

Dr. William Holt, who has been one of the assistant superintendents for the past year, resigned on September 1st to become resident physician to the Phillips Exeter Academy, Exeter, N. H.

Dr. William Newton Hughes finished his term of service as interne on September 1st, and on September 8th was married to Miss Pauline A. Barrows at the home of her parents, 68 Keene Street. Dr. Hughes began practice in Manton on October 1st, it being his intention to specialize in neuro-psychiatry as soon as possible.

On October 1st, Dr. John A. Bolster completed his internship and began a four months' term of service at the Providence Lying-In Hospital.

Dr. Francis V. Garside has been acting as assistant superintendent for the summer, and Dr. James F. O'Brien has served as substitute interne.

## CASE REPORT

Mrs. M. H. R. admitted to Providence Lying-In Hospital unconscious. Patient was at full term and was stricken with convulsions ten hours previous to admission. Blood pressure was 200/70 and urine showed a large amount of albumen with many fine and coarse granular casts.

Vorhees bag was inserted and patient was delivered of a seven and three-quarters pound baby with the aid of low forceps at 9 A. M. Child gasped once but no heart beat could be felt or heard. Ten minims of adrenalin, 1-1000, was introduced directly into heart muscle and within a few seconds pulse was 96, regular and of good quality. Artificial respiration was instituted at once and in about ten minutes pulse was 120, respirations regular and child gave a weak cry.

1:30 P. M.—Nurse reported child was black in the face and apparently dead. No heart beat or breath sounds could be heard on auscultation. Fifteen minims of adrenalin was again injected into heart and in about fifteen seconds heart started to beat at the rate of 100 beats per minute. Child was immediately insufflated, mouth to mouth, and the cyanosis disappeared. Pulse now was 120.

4 P. M.—Child was reported as cyanotic again. Heart rate was 60, regular and of fairly good quality but slowing. Ten minims of adrenalin was administered and the cyanosis almost disappeared.

7 P. M.—Child was reported as cyanotic again. Ten minims of adrenalin was again given. Color improved but the effect was less than the previous time.

7:30 P. M.—Child was reported as white and motionless. Auscultation revealed no heart beat or breath sounds. Ten minims of adrenalin was given again, followed by insufflation and massage of heart but child never revived.

Thus, child was revived four times by the use of adrenalin and lived a total of ten hours and a half after delivery.

EARL A. BOWEN, M.D.

## SOCIETIES

The Rhode Island Medical Society held its Quarterly Meeting Thursday, September 6th, 1923, at 4 P. M., at the Medical Library Building, Providence. The following program was offered:

Papers: 1. Modern Italian Surgery. John W. Keefe, M.D., Providence. 2. The Clinical Application of some newer phases in Endometrial Pathology. Arnold Sturmdorf, M.D., New York.

Collation followed.